

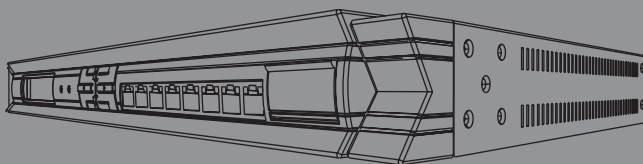


 **NETDEFEND**

NETWORK SECURITY FIREWALL

This Quick Guide will guide you through the installation Process. You are only moments away from using your new D-Link Network Security Product

DFL-2500



1.Before You Begin

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DFL-2500 Before You Begin

1

1.1 Check Your Package Contents

Your NetDefend Network Security Firewall package should contain all the items listed below. If any of these items is found damaged or missing in your package, report it to your reseller immediately for replacement.

- One (1) DFL-2500 NetDefend™ Network Security Firewall
- One (1) Power Cord
- One (1) Console Cable (RS-232 cable)
- One (1) Ethernet (CAT5 UTP/Straight Through) Cable
- One (1) Ethernet (CAT5 UTP/Cross-over) Cable
- One (1) CD-ROM (containing QIG/Manual)
- Two (2) Rack Mount Brackets



DFL-2500



Power Cord



Rack Mount Brackets



Ethernet Cable
(Straight-Through)



Ethernet Cable
(Cross-over)



Console Cable



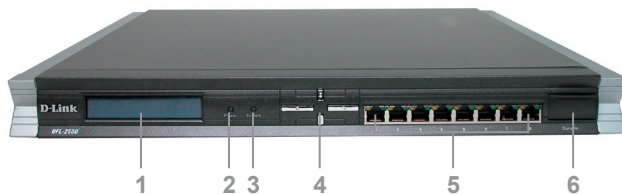
CD-ROM

Identifying Components

2

The following illustrates the front panel of the DFL-2500 and explains the front panel's key components:

2.1 Front View

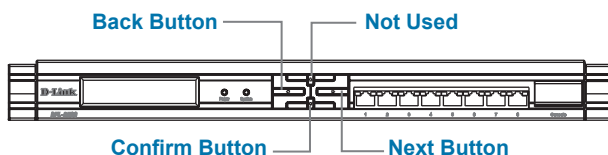


- | | |
|--------------------------|---|
| 1. LCD Panel | Used to display operation messages and various status of the DFL-2500. See the following section for details. |
| 2. Power LED | Power indication of the DFL-2500. |
| 3. System LED | System status indication of the DFL-2500. |
| 4. Keypad | Operation keys used in conjunction with the LCD panel. |
| 5. Ethernet ports | Connect to Ethernet cables that connect to broadband modems and network switches. |
| 6. Console Port | Connects to RS-232 console cable that connects to PC. The console port is hidden behind a protection coverlid that can be opened by pulling down the lid. |

2.2 LCD Panel and Keypad

When you turn on the power of the DFL-2500, the LCD panel will display the following message: **“Press Keypad to enter setup”** and press any key on the keypad to enter the startup menu. If after five seconds, you do not press any key on the keypad, the DFL-2500 will automatically start the system.

2.2.1 Startup Menu



Keypad buttons definition in Startup Menu

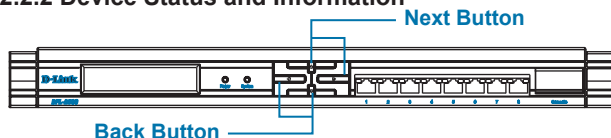
If you press any key within five seconds after power-on, the LCD will display two options:

1. **Start Firewall**: If you select this option, the system will start, using the configuration saved inside the device.
2. **Reset Firewall**: If you select this option, the system will start, using the factory default configuration.

⚠ Note:

If you select **“Reset Firewall”** and confirm this option, all previous configurations that you saved in this device will be lost forever.

2.2.2 Device Status and Information



Keypad buttons definition in Status Information

After the DFL-2500 has completed its system startup, the LCD panel is ready to display the status and information of this device. You can use the keypad to select a desired display option. The following shows status and information that can be displayed on the LCD panel.

Item	Description
Model name:	Display the device model name.
System Status:	Display system working status.
CPU Load:	It will show the CPU utilization and concurrent session
Connections:	
Total BPS:	Concurrent traffic statistics per second.
Total PPS:	Concurrent packets statistics per second.
Date:	Device current date.
Time:	Device current time.
Uptime:	Device boot up time.
Mem:	System memory utilization.
IDS Sigs:	It will display IDS signature information.
WAN1:	Display each interface IP address
WAN2:	
WAN3:	
WAN4:	
DMZ:	
LAN1:	
LAN2:	
LAN3:	
Core Version:	Display firewall firmware version.

2.3 LED Indicators

LED	Status	Color	Description
Power	Solid green Light off	Green	The device is powered on. The device is powered off.
System	Solid green Light off Blinking green	Green	System is operating properly. The device is not working. System is defective, such firmware upgrade fail.
Phone Jack LED light (right)	Light off Solid Green Blinking Green	Green	No link Link present Port is sending or receiving data.
Phone Jack LED light (left)	Light off Solid green Solid orange	Green/ Orange	Port is operating at 10Mbps. Port is operating at 100Mbps. Port is operating at 1000Mbps.

2.4 Default Interface Attribute Definition

Wording on Front plate	Default name in firewall	Default interface type definition	Default interface IP Address	Default DHCP Status
1	WAN1	Static IP	192.168.110.254/24	Disable
2	WAN2	Static IP	192.168.120.254/24	Disable
3	WAN3	Static IP	192.168.130.254/24	Disable
4	WAN4	Static IP	192.168.140.254/24	Disable
5	DMZ	Static IP	172.17.100.254/24	Disable
6	LAN1	Static IP	192.168.1.1/24	Disable
7	LAN2	Static IP	192.168.2.1/24	Disable
8	LAN3	Static IP	192.168.3.1/24	Disable



Note:

For security reason, default only allow LAN1 interface (192.168.1.1) that can login into firewall GUI from Web browser. You also can modify this configuration after login into firewall GUI. About the detail set up procedure, please refer to the user's manual.

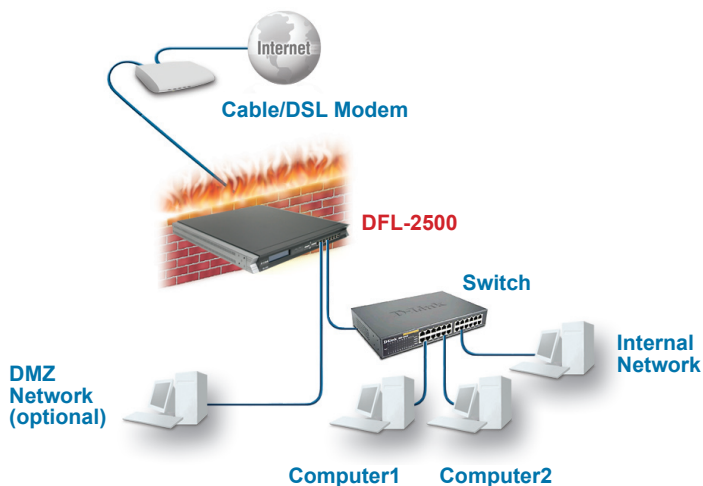
3.1 Connecting Firewall to Your Network

- A.** First, connect the power cord to the receptor at the back panel of the DFL-2500 and then plug the other end of the power cord to a wall outlet or power strip. Then powered on the DFL-2500 using the on/off switch. Now the Power LED will turn ON to indicate proper operation.
- B.** 1. Powered off your Cable or DSL modem; some devices may not have a on/off switch and will require you to unplug the power adapter. Now, the DFL-2500 should be powered on and the Cable / DSL modem should be turned off.
2. Cable / DSL modem (**Powered Off**) - DFL-2500 (**Powered On**)
Connect an Ethernet cable to the Ethernet jack located on the Cable / DSL modem. After the Ethernet cable is securely connected, powered on the Cable / DSL modem by turning on the unit or plugging in the power adapter.
3. Cable / DSL modem (**Powered On**) - DFL-2500 (**Powered On**)
Insert the other end of the Ethernet cable to one of the Ethernet ports on the front panel of the DFL-2500. The LED light above the Ethernet port will illuminate to indicate proper connection. If the LED light is not illuminated, please go back to step B and repeat its instructions.
- C.** Insert an Ethernet cable to the LAN1 port on the front panel of the DFL-2500 and connect it to a port on your network hub or switch. The LED light above the Ethernet port on the DFL-2500 will illuminate to indicate proper connection
- D.** Connecting the computer that you will use to configure the DFL-2500 to the network hub or switch.

4.1 Configure your Computer's IP Address

Make sure that the network adapter in your computer is configured to use a static IP address with 192.168.1.1 as default gateway and 255.255.255.0 as netmask. Instructions on how to configure the network adapter can be found in the appendix.

When you have completed the steps in this *Quick Installation Guide*, your connected network should look similar to this:

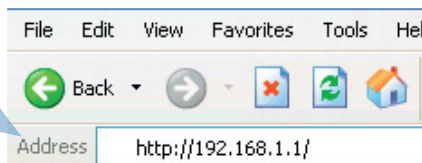


4.2 Using the Setup Wizard

The DFL-2500 provides Web based configuration. You can configure your DFL-2500 through Internet Explorer 6 or Firefox 1.0 browser in MS Windows, Macintosh or UNIX based platforms.

Activate your browser. Then type the IP address of the DFL-2500 into the Location (for Netscape) or Address (for IE) field and press "Enter." For example: `http://192.168.1.1`.

Open your Web browser and type **http://192.168.1.1 /** into the URL address box. Then press the Enter or Return key.



(The IP Address shown in the example above is the default setting. If you have changed the IP Address of the DFL-2500 to conform to a network, then input that IP Address in the web browser, instead of the default IP Address shown.)

Log on to the DFL-1600 web interface.

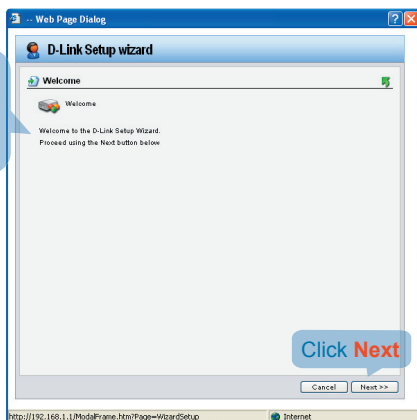
To start using the DFL-2500 web interface you need to log on using the default username and password.

Type the default Username/Password
Username: admin
Pasword: admin
and click Login



Step1 - Welcome to the DFL-2500 setup wizard!

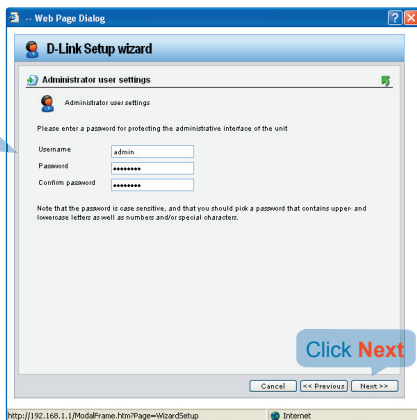
This wizard will guide you through the setup of your DFL-2500



Step2 - Set up firewall administrator password

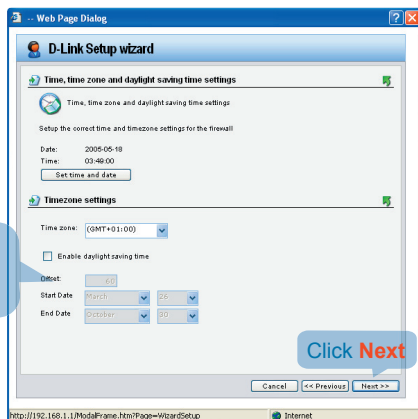
First **Enter** the username that you want to use for the admin account.

Enter the password that you want to use for the admin account.



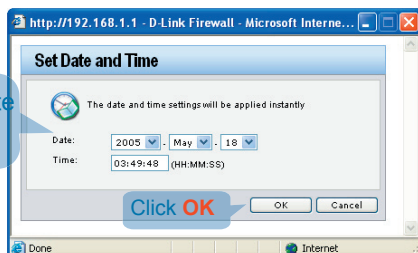
Step 3 - Set up time and date

Click Set time and date button for setting device



The screenshot shows the 'D-Link Setup wizard' window with the 'Time, time zone and daylight saving time settings' tab selected. The 'Time' section shows 'Date: 2005-05-18' and 'Time: 03:46:00' with a 'Set time and date' button. The 'Timezone settings' section shows 'Time zone: (GMT+01:00)', an unchecked 'Enable daylight saving time' checkbox, and 'Offset: 60'. The 'Start Date' is 'March 26' and the 'End Date' is 'October 30'. At the bottom right, a 'Next >>' button is highlighted with a callout 'Click Next'. The status bar at the bottom shows the URL 'http://192.168.1.1/ModalFrame.htm?Page=WizardSetup' and an 'Internet' icon.

Select the appropriate date
Enter the appropriate time



The screenshot shows the 'Set Date and Time' dialog box. It contains the text 'The date and time settings will be applied instantly'. The 'Date' field is set to '2005 May 18' and the 'Time' field is set to '03:49:48 (HH:MM:SS)'. At the bottom, there are 'OK' and 'Cancel' buttons, with a callout 'Click OK' pointing to the 'OK' button. The status bar at the bottom shows 'Done' and 'Internet'.

Step 4 - Set up timezone

Select the appropriate timezone.
Enter the appropriate daylight saving time settings.

The screenshot shows the 'D-Link Setup wizard' window with the 'Time, time zone and daylight saving time settings' tab selected. The 'Timezone settings' section is active. It includes a 'Time zone' dropdown menu set to '(GMT+01:00)', a checked 'Enable daylight saving time' checkbox, and fields for 'Offset' (60), 'Start Date' (March 26), and 'End Date' (October 30). A blue callout bubble points to the 'Time zone' dropdown with the text 'Select the appropriate timezone. Enter the appropriate daylight saving time settings.' Another blue callout bubble points to the 'Next >>' button with the text 'Click Next'. The window title bar says 'Web Page Dialog' and the status bar shows the URL 'http://192.168.1.1/ModeFrame.htm?Page=WizardSetup' and 'Internet'.

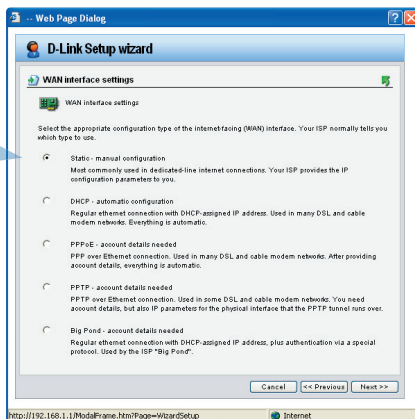
Step 5 - Select WAN interface

Select the WAN interface that you want to use.

The screenshot shows the 'D-Link Setup wizard' window with the 'WAN interface settings' tab selected. The 'WAN interface settings' section is active. It includes a 'Select the interface that is connected to the ISP' instruction and an 'Interface' dropdown menu set to 'wan1'. A blue callout bubble points to the 'Interface' dropdown with the text 'Select the WAN interface that you want to use.' Another blue callout bubble points to the 'Next >>' button with the text 'Click Next'. The window title bar says 'Web Page Dialog' and the status bar shows the URL 'http://192.168.1.1/ModeFrame.htm?Page=WizardSetup' and 'Internet'.

Step 6 - Configure WAN interface

Select the appropriate configuration for the WAN interface, Click **Next** and continue to step 7.1 further down.

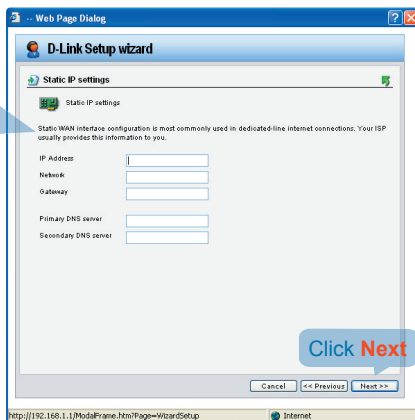


Note:

If you are unsure of which setting to select, please contact your Internet Service Provider.

Step 7.1 - WAN Interface Type is Static IP

If you selected Static IP you have to fill out the IP address information provided to you by your ISP. You will need to complete all the required fields except for Secondary DNS Server.



Step 7.2 - WAN Interface Type is PPPoE

If you selected PPPoE (Point-to-Point Protocol over Ethernet) you will have to fill out the user name and password provided to you by your ISP. The PPPoE Service Name field should be left blank unless your ISP informs you otherwise.

Web Page Dialog

D-Link Setup wizard

PPPoE settings

PPPoE over Ethernet connections are used in many DSL and cable modem networks. After authenticating, everything is automatic.

Username:

Password:

Confirm password:

Service:

Click Next

Cancel << Previous Next >>

http://192.168.1.1/ModelFrame.htm?Page=WizardSetup Internet

Step 7.3 - WAN Interface Type is PPTP

Enter Username, Password and the PPTP Server IP address provided by your ISP.

DHCP: If your ISP is using DHCP you should select the DHCP radio button.

Static IP: If your Internet Service Provider is using Static IP you should select the Static IP radio button and enter IP Address, choose a Subnet Mask and enter the Gateway IP address.

Web Page Dialog

D-Link Setup wizard

PPTP settings

PPTP over Ethernet connections are used in some DSL and cable modem networks. You need account details, and possibly also IP configuration parameters of the actual physical interface that the PPTP tunnel runs over. Your ISP should supply this information.

PPTP tunnel parameters:

Username:

Password:

Confirm password:

Remote Endpoint:

Physical interface parameters:

☒ DHCP

☐ Static

IP Address:

Subnet Mask:

Gateway:

Click Next

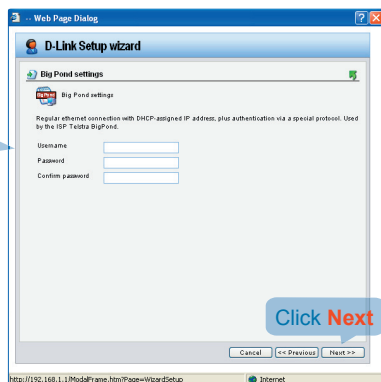
Cancel << Previous Next >>

http://192.168.1.1/ModelFrame.htm?Page=WizardSetup Internet

Step 7.4 - WAN Interface Type is Big Pond

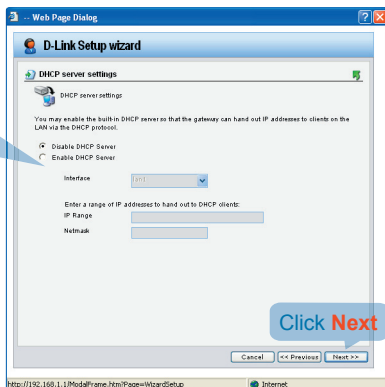
If you selected Big Pond you will have to fill out the user name and password provided to you by your ISP.

Click **Next** and continue to step 8.



Step 8 - Set up built-in DHCP server

If you want to use the built-in DHCP Server in the DFL-800, choose **Enable DHCP Server** in this screen. You then need to specify a range of IP addresses to hand out to the DHCP clients. This range is entered in the format **“Start IP - Stop IP”** i.e. 192.168.0.100 - 192.168.0.200. If you don't want to use the built-in DHCP Server or configure it later, choose Disable DHCP Server.



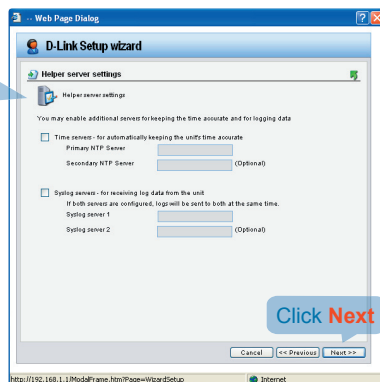
Step 9 - Configure helper servers

NTP Servers

If enabled, specify which NTP Servers that should be used to synchronize the firewall time

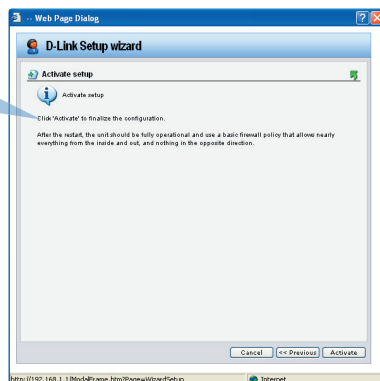
Syslog Servers

If enabled, specify where the firewall should log, you can specify up to two Syslog receivers



Step10 - Setup Wizard Complete

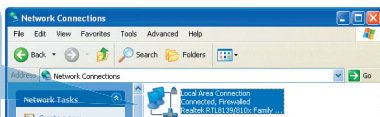
Click **Activate** to complete your configuration.



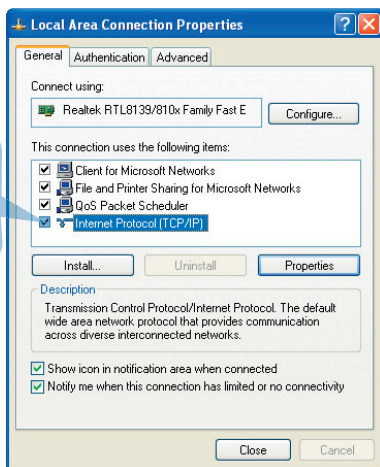
To connect to the DFL-2500 Network Security Firewall, make sure the network adapter in your computer is configured properly. Here is how to configure the network adapter manually to the correct IP-address.

5.1 How to configure Static IP Manually on Microsoft Windows XP

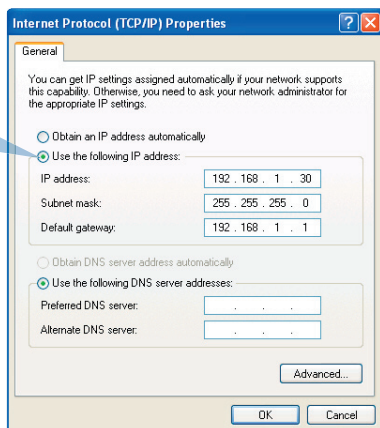
Go to **Start > right click on My Network Places > select Properties > Right-click on the Network Connection** of the Ethernet adapter connecting to the DFL-2500 and select **Properties**.



Click **Internet Protocol (TCP/IP)**
Click **Properties**



Select **Use the following IP address**
Set IP address to **192.168.1.30**,
Subnet mask to **255.255.255.0**
and Default gateway to **192.168.1.1**
Click **OK**

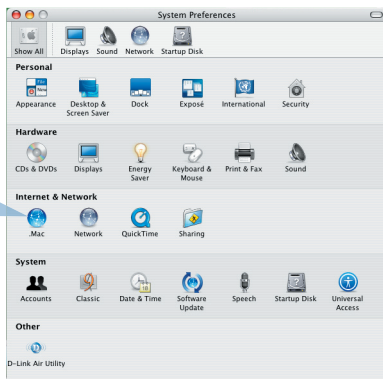


Note:

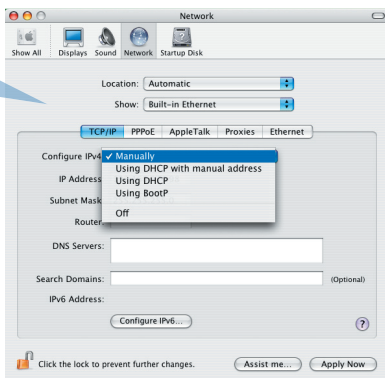
Except for 192.168.1.1, you could set your PC with any IP addresses that same as the 192.168.0.0/ 255.255.255.0 subnet.

5.2 How to Configure Static IP Manually on Apple Mac OS X

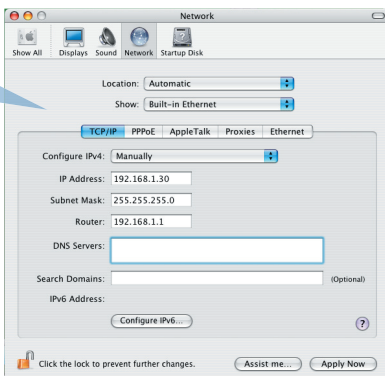
Go to the **Apple Menu**
Click on **Network**
and **Select System Preferences**
Click on **Network**



Select **Built-in Ethernet** in the show pull down menu
Select **Manually** in the Configure pull down menu



Set IP Address to **192.168.1.30**,
Subnet Mask to **255.255.255.0**
and Router to **192.168.1.1**.
Click on **Apply Now**



Warranty

FCC Warning

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with this manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

CE Mark Warning

This is a Class A product. In a domestic environment, this product may cause radio interference in which case the user may be required to take adequate measures.

Warnung!

Dies ist ein Produkt der Klasse A. Im Wohnbereich kann dieses Produkt Funkstörungen verursachen. In diesem Fall kann vom Benutzer verlangt werden, angemessene Massnahmen zu ergreifen.

Precaución!

Este es un producto de Clase A. En un entorno doméstico, puede causar interferencias de radio, en cuyo caso, puede requerirse al usuario para que adopte las medidas adecuadas.

Attention!

Ceci est un produit de classe A. Dans un environnement domestique, ce produit pourrait causer des interférences radio, auquel cas l'utilisateur devrait prendre les mesures adéquates.

Attenzione!

Il presente prodotto appartiene alla classe A. Se utilizzato in ambiente domestico il prodotto può causare interferenze radio, nel cui caso è possibile che l'utente debba assumere provvedimenti adeguati.

VCCI Warning

この装置は、クラス A 情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。

BSMI Warning

警告使用表

這是乙類的資訊產品，在居住的環境中使用時，可能會造成射頻干擾，在這種情況下使用者會被要求採取某些適當的對策。